

**Commonwealth of Kentucky**  
**Division for Air Quality**  
***RESPONSE TO COMMENTS***

ON THE FEDERALLY ENFORCEABLE CONDITIONAL MAJOR DRAFT PERMIT

No. F-05-021

The Valvoline Company

Ashland, Kentucky

August 5, 2005

JOSHUA J. HIGGINS, REVIEWER

SOURCE I.D. #: 21-119-0110

SOURCE A.I. #: 40443

ACTIVITY #: APE20040001

**SOURCE DESCRIPTION:**

The Valvoline Company operates an Automotive Products Application Laboratory (APAL) in Boyd County, Kentucky, with the primary purpose of running automotive engine tests to evaluate how engine fluids perform under operating conditions. The facility was established in 1953. None of the engines are operated with a catalytic converter attached because a converter would interfere with the testing process by affecting the backpressure experienced by the engine. As a result of the lack of a catalytic converter, pre-1975 emission factors from AP-42, Volume II, Appendix H were used to ensure conservative estimates from the engines. The automotive engines in the test facility are operated for varying time periods in order to test the performance of lubricants and similar materials. The engines are not operated twenty-four hours per day, and it is unlikely that testing schedules would result in all the engines operating at the same time.

The Valvoline Company is also applying to install and operate an Air Sparge/Soil Vapor Extraction (AS/SVE) system at the site to remedy dissolved phase hydrocarbon-impacted soil and groundwater. The sparging network will consist of two sets of three sparge points installed to a depth of approximately 40 feet. The sparging will typically occur at a low flow rate of approximately 4 scfm per sparge point at 5 psig, however the air sparge compressor is capable of delivering 110 scfm at 15 psig. Sparging will be applied alternately between sets of sparge points. The SVE points will be installed to a depth of approximately 30 feet, and, through use of a vacuum pump, will remove VOC's from the unsaturated soils and recover sparged air. The extracted vapor/water mixture will be routed through a knock out tank to remove moisture, and the vapor through a carbon adsorber to reduce HAP emissions. Accumulated water in the knock out tank will be pumped to a hold tank for periodic disposal.

**PUBLIC AND U.S. EPA REVIEW:**

On June 6, 2005, the public notice on availability of the draft permit and supporting material for comments by persons affected by the plant was published in *The Independent* in Ashland, Kentucky. The public comment period expired 30 days from the date of publication.

No comments were received during this period. The permit is now being issued final.